

AMENDMENTS TO THE CLAIMS

Claims 1-30 (Canceled)

Claim 31 (New) A waste liquid regeneration apparatus for a printer, comprising:

a vessel into which waste liquid containing ink pigment, water and cleaning fluid used in the printer is supplied;

a first chamber and a second chamber provided in said vessel;

a metal electrode plate disposed substantially horizontally in said vessel so as to partition said first chamber from said second chamber while allowing the waste liquid to flow between said first chamber and said second chamber, said metal electrode plate having a top surface facing said second chamber and an under surface facing said first chamber;

a third chamber, located below said first chamber and separated from said metal electrode plate, for reserving water;

a high voltage power supply for applying a voltage to said metal electrode plate;

a grounding electrode connected to the water in said third chamber; and

a waste liquid supplying apparatus for supplying the waste liquid to said first chamber, said waste liquid supplying apparatus having an intermittent supplying mode in which mode the waste liquid is alternately supplied and stopped from being supplied to said first chamber.

Claim 32 (New) The waste liquid regeneration apparatus of claim 31, and further comprising:

a first detection apparatus for detecting a physical characteristic that correlates with the concentration of the ink pigment in regenerated cleaning fluid regenerated by said waste liquid regeneration apparatus;

a control apparatus for controlling at least one of a supply rate, supply time and stopping time of the waste liquid by said waste liquid supply apparatus in response to a detection result from said first detection apparatus such that the concentration of the ink pigment in the regenerated cleaning fluid remains within a predetermined control range.

Claim 33 (New) The waste liquid regeneration apparatus of claim 31, wherein said waste liquid supply apparatus further has a continuous supplying mode in which the waste liquid is supplied continuously to said first chamber, said waste liquid supplying apparatus being operable to be switched between said intermittent supplying mode and said continuous supplying mode.

Claim 34 (New) The waste liquid regeneration apparatus of claim 33, and further comprising:

a second detection apparatus for detecting a physical amount correlated with the concentration of the water in the waste liquid supplied into said first chamber by said waste liquid supplying apparatus; and

a changeover apparatus for changing over said waste liquid supplying apparatus between said intermittent supplying mode and said continuous supplying mode as a result of detection by said second detection apparatus in such a manner that when the concentration of the water in the waste liquid is within a predetermined range, said waste liquid supplying apparatus is operated in said intermittent supplying mode and when the concentration of the water in the waste liquid is outside of the predetermined range, said waste liquid supplying apparatus is operated in said continuous supplying mode.